

**REMARKS**

Claims 1-36 are pending in the application. Claims 1-4, 11, 19, 24-26, 30-32, and 35 are amended. Claims 20-23 are withdrawn. Reexamination and reconsideration are respectfully requested.

**Claim Rejections – 35 U.S.C. § 112**

The Examiner rejected Claims 2-7 and 24-31 under 35 U.S.C. § 112, second paragraph, as being indefinite.

Applicants amended Claims 2-4 and 24-26 to address this rejection and respectfully request that this rejection be withdrawn.

**Claim Rejections – 35 U.S.C. § 103**

The Examiner rejected Claims 1-7, 9-19, and 32-36 as being unpatentable over U.S. Patent No. 6,394,445 (“d’Agrella”) in view of U.S. Patent No. 6,776,750 (“Stieler”).

d’Agrella does not teach or suggest the subject matter of independent Claim 1 as acknowledged by the Examiner. See Office Action dated April 29, 2005, at page 4. Stieler does not cure the deficiencies of d’Agrella. Stieler does not teach or suggest the subject matter of independent Claim 1. Specifically, Stieler does not teach or suggest a first motor operable to drive the infeed roller at a first speed, a second motor operable to drive the cutting cylinders at a second speed that is independently variable from the first speed, a diverter mechanism positioned downstream of the cutting cylinders, and, a third motor operable to drive the diverter mechanism at a third speed that is independently variable from the first and second speeds.

Rather, Stieler discloses a drive system for a folder of a rotary printing machine. The folder includes a cutting cylinder 1, a pin folding blade cylinder 3, a folding jaw cylinder 4, and a gripper folding blade cylinder 5. Col. 3, lines 17-25. The pin folding blade cylinder 3 includes two cylinder parts 7 and 8. The cylinder part 7 includes three rows of perforating needles 13, which interact with the cutting knives 14 of the cutting cylinder 1 and are driven by drive motor 21 positioned on the cutting cylinder 1. The drive motor 21, the cutting cylinder 1, and the perforating part 7 of the pin folding blade cylinder 3 represent a first subsystem A. Col. 3, lines 37-40.

The cylinder part 8 includes folding blades 15, which interact with the cylinder part 9 on the folding jaw cylinder 4 and cylinder part 11 on the gripper folding blade cylinder 5. The

cylinder part 9 includes folding jaws 16, and the cylinder part 11 includes grippers 17. The cylinder part 8 is driven by drive motor 25. The drive motor 25, the cylinder part 8, the cylinder part 9, and the cylinder part 11 represent a second subsystem B. Col. 3, lines 63-67.

The gripper folding blade cylinder 5 includes cylinder part 12, which includes folding blades 18. The cylinder part 12 interacts with folding jaws 19 on the folding jaw cylinder 4. The cylinder part 10 and the cylinder part 12 are driven by a drive motor 23. The drive motor 23, the cylinder part 10, and the cylinder part 12 represent a subsystem C. Col. 4, lines 10-13.

The subsystems A, B, and C are connected by switchable clutches 33, 34, and 35, which can be activated or deactivated depending on the torque needed or in the event of failure of one of the drive motors 21, 23, and 25.

First, each of the motors 21, 23, and 25 controls several parts on more than one cylinder. Each motor 21, 23, and 25 does not solely control the actions of a single cylinder or component. Also, the motors 21, 23, and 25 are not activated or deactivated as indicated by the Examiner, but rather the clutches are activated or deactivated to connect or disconnect the subsystems A, B, or C.

Second, Stieler does not disclose a diverter mechanism with a corresponding motor or a motor for the infeed rollers. Stieler also does not disclose that the speeds of each motor for the infeed roller, the cutting cylinders, and the diverter mechanism are independently variable.

In addition, there is no suggestion or motivation to combine the teachings of d'Agrella and Stieler. Further, the references teach away from being combined. The Examiner indicates that "it would be obvious ... to provide separate motors as taught by Stieler et al. in the folder for a printing press of d'Agrella et al. for infeed rollers, cutting cylinders and diverter mechanism to continue to operate the folder without functional impairment in the event of failure of a motor and therefore the serviceability of the entire folder is ensured, for adjustment functions for format change and division of the power in the drive can be carried out, as a result smaller drive motors can be used, which reduces the dimensioning of the controlled electronics in a corresponding way." Applicants respectfully disagree.

If multiple motors as in Stieler were combined with the folder system of d'Agrella, the folder system of d'Agrella would still need to shut down in the event of a motor failure. The component of d'Agrella being controlled by the failed motor would stop operating, thereby shutting down the entire folder system. On the other hand, each of the motors 21, 23, and 25 in

Stieler controls a plurality of parts or components on each of the cylinders 3, 4, and 5. If one of the motors 21, 23, and 25 fails, the corresponding clutch of the affected subsystem can be deactivated from the remaining subsystems allowing the unaffected subsystems to continue operating. The components in d'Agrella are not arranged in this manner such that one component can be bypassed in the event of a motor failure.

For at least these reasons, d'Agrella and Stieler do not teach or suggest the subject matter of independent Claim 1. Accordingly, independent Claim 1 is allowable. Claims 2-11 depend from independent Claim 1 and are therefore allowable for at least the reasons Claim 1 is allowable.

Amended Claim 3 further specifies a fourth motor operable to drive the first delivery belt at a fourth speed that is independently variable from the first, second, and third, speeds and a fifth motor operable to drive the second delivery belt at a fourth speed that is independently variable from the first, second, and third, and fourth speeds.

d'Agrella does not teach or suggest the subject matter of Claim 3. Stieler does not cure the deficiencies of d'Agrella. Stieler does not teach or suggest belts or motors that control a belt. In fact, the word "belt" does not appear in Stieler. There is no suggestion that the motors 21, 23, and 25 in Stieler used to control cylinders could be configured for use with belts.

In addition, for at least the reasons discussed above, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 3 includes additional patentable subject matter.

Amended Claim 4 further specifies first and second collator belts circulating in endless loops, the first collator belt lying in substantially face to face relation with the first delivery belt to define a first collation path extending away from a first side of the diverter mechanism, and the second collator belt lying in substantially face to face relation with the second delivery belt to define a second collation path extending away from a second side of the diverter mechanism, wherein the first collator belt is driven by the fourth motor and the second collator belt is driven by the fifth motor.

d'Agrella does not teach or suggest the subject matter of Claim 4. Stieler does not cure the deficiencies of d'Agrella. Stieler does not teach or suggest belts or motors that control a belt. In fact, the word "belt" does not appear in Stieler. There is no suggestion that the motors 21, 23, and 25 in Stieler used to control cylinders could be configured for use with belts.

In addition, for at least the reasons discussed above, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 4 includes additional patentable subject matter.

Claim 5 further specifies wherein the third speed is adjustable to zero to thereby divert signatures toward only one of the first and second collation paths. The Examiner has not provided support for this rejection. The present Office Action does not specify where this subject matter is shown in d'Agrella or Stieler. d'Agrella and Stieler do not teach or suggest the subject matter of Claim 5. Accordingly, Claim 5 includes additional patentable subject matter.

Claim 6 further specifies a first slow-down mechanism positioned along the first collation path and independently driven by a sixth motor, and a second slow-down mechanism positioned along the second collation path and independently driven by a seventh motor.

d'Agrella does not teach or suggest the subject matter of Claim 6. Stieler does not cure the deficiencies of d'Agrella. Stieler does not teach or suggest slow-down mechanisms or motors that control slow-down mechanisms. There is no suggestion that the motors 21, 23, and 25 in Stieler to control cylinders could be configured for use with slow-down mechanisms. In addition, Stieler does not disclose more than five motors.

In addition, for at least the reasons discussed above, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 6 includes additional patentable subject matter.

Claim 7 further specifies a first delivery bucket positioned downstream of the first slow-down mechanism and independently driven by an eighth motor, and a second delivery bucket positioned downstream of the second slow-down mechanism and independently driven by a ninth motor.

d'Agrella does not teach or suggest the subject matter of Claim 7. Stieler does not cure the deficiencies of d'Agrella. Stieler does not teach or suggest delivery buckets or motors that control delivery buckets. There is no suggestion that the motors 21, 23, and 25 in Stieler to control cylinders could be configured for use with delivery buckets. In addition, Stieler does not disclose more than five motors.

In addition, for at least the reasons discussed above, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 7 includes additional patentable subject matter.

Claim 11 further specifies a printed product sensor positioned between the cutting cylinders and the diverter mechanism and operable to sense the relative position of sequential printed products traveling through the folder, and wherein the third speed is changed in response to the relative position of sequential printed products sensed by the sensor.

d'Agrella does not teach or suggest the subject matter of Claim 11. The Examiner indicates that d'Agrella discloses printed product sensors to control the motor at column 15, lines 33-58. This citation refers to sensors positioned upstream of the slow-down mechanism 46 and near idler lead-in roll 66, which is downstream of the diverter mechanism. The claim language specifies that the sensor is positioned between the cutting cylinders and the diverter mechanism.

In addition, for at least the reasons discussed above, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 11 includes additional patentable subject matter.

d'Agrella and Stieler do not teach or suggest the subject matter of independent Claim 12 for at least the reasons discussed above with respect to Claims 1 and 3. In addition, there is no suggestion or motivation to combine the teachings of d'Agrella and Stieler. Further, the references teach away from being combined.

If multiple motors as in Stieler were combined with the folder system of d'Agrella, the folder system of d'Agrella would still need to shut down in the event of a motor failure. The component of d'Agrella being controlled by the failed motor would stop operating, thereby shutting down the entire folder system. On the other hand, each of the motors 21, 23, and 25 in Stieler controls a plurality of parts or components on each of the cylinders 3, 4, and 5. If one of the motors 21, 23, and 25 fails, the corresponding clutch of the affected subsystem can be deactivated from the remaining subsystems allowing the unaffected subsystems to continue operating. The components in d'Agrella are not arranged in this manner such that one component can be bypassed in the event of a motor failure.

For at least these reasons, d'Agrella and Stieler do not teach or suggest the subject matter of independent Claim 12. Accordingly, independent Claim 12 is allowable. Claims 13-19 depend from independent Claim 12 and are therefore allowable for at least the reasons Claim 12 is allowable.

Claim 16 further specifies an infeed motor operable to drive the guide rollers. The Examiner has not provided support for this rejection. The present Office Action does not specify

where this subject matter is shown in d'Agrella or Stieler. d'Agrella and Stieler do not teach or suggest the subject matter of Claim 16. Accordingly, Claim 16 includes additional patentable subject matter.

Claim 17 further specifies wherein the delivery belts include a first delivery belt and a second delivery belt lying in face to face relation between the cutting section and the diverting section, the folder further comprising a first collator belt lying in face to face relation with the first delivery belt downstream of the diverting section, and a second collator belt lying in face to face relation with the second delivery belt downstream of the diverting section, and wherein the at least one delivery motor includes a first delivery motor operable to drive the first delivery belt and the first collator belt, and a second delivery motor operable to drive the second delivery belt and the second collator belt. For at least the reasons discussed above with respect to Claim 4, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 14 includes additional patentable subject matter.

Claim 19 further specifies a printed product sensor positioned between the cutting section and the diverting assembly and operable to sense the relative position of sequential printed products traveling through the folder, and wherein the diverting motor operates in response to the relative position of sequential printed products sensed by the sensor. For at least the reasons discussed above with respect to Claim 11, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 19 includes additional patentable subject matter.

d'Agrella and Stieler do not teach or suggest the subject matter of independent Claim 32 for at least the reasons discussed above with respect to Claims 1, 3, and 11. In addition, there is no suggestion or motivation to combine the teachings of d'Agrella and Stieler. Further, the references teach away from being combined.

If multiple motors as in Stieler were combined with the folder system of d'Agrella, the folder system of d'Agrella would still need to shut down in the event of a motor failure. The component of d'Agrella being controlled by the failed motor would stop operating, thereby shutting down the entire folder system. On the other hand, each of the motors 21, 23, and 25 in Stieler controls a plurality of parts or components on each of the cylinders 3, 4, and 5. If one of the motors 21, 23, and 25 fails, the corresponding clutch of the affected subsystem can be deactivated from the remaining subsystems allowing the unaffected subsystems to continue

operating. The components in d'Agrella are not arranged in this manner such that one component can be bypassed in the event of a motor failure.

For at least these reasons, d'Agrella and Stieler do not teach or suggest the subject matter of independent Claim 32. Accordingly, independent Claim 32 is allowable. Claims 33-36 depend from independent Claim 32 and are therefore allowable for at least the reasons Claim 32 is allowable.

Claim 33 further specifies a cutting section upstream of the first sensor and including cutting cylinders that cut the web into the individual printed products, and a cutting motor operable to drive the cutting cylinders independently of the delivery motor and the diverting motor. As noted above, d'Agrella and Stieler do not teach or suggest the subject matter of Claim 33. In addition, there is no suggestion or motivation to combine the teachings of d'Agrella and Stieler. Further, the references teach away from being combined. Accordingly, Claim 33 includes additional patentable subject matter.

Claim 34 further specifies a first slow-down mechanism positioned along a first collation path downstream of the diverting assembly and independently driven by a first slow-down motor, and a second slow-down mechanism positioned along a second collation path downstream of the diverting assembly and independently driven by a second slow-down motor. For at least the reasons discussed above with respect to Claim 6, there is no suggestion or motivation to combine d'Agrella and Stieler. Accordingly, Claim 34 includes additional patentable subject matter.

The Examiner rejected Claim 8 under 35 U.S.C. § 103 as being unpatentable over d'Agrella and Stieler, and further in view of U.S. Patent No. 6,360,640 ("Cote").

Claim 8 depends from independent Claim 1, and is therefore allowable for at least the reasons Claim 1 is allowable. Cote does not cure the deficiencies of Claim 8. Accordingly, Claim 8 includes additional patentable subject matter.

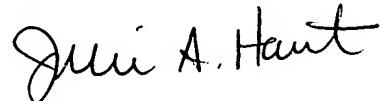
#### Allowable Subject Matter

Applicants appreciate the Examiner's indication that Claims 24-31 are allowable if the 35 U.S.C. § 112 rejection is addressed. Claims 24-26 are amended to address the 35 U.S.C. § 112 rejection.

**CONCLUSION**

In view of the above remarks, it is submitted that the application is in condition for allowance.

Respectfully submitted,



Julie A. Haut  
Reg. No. 51,789

Docket No. 077077-9146-00  
Michael Best & Friedrich LLP  
100 East Wisconsin Avenue  
Suite 3300  
Milwaukee, Wisconsin 53202-4108  
414.271.6560